

# Resurfacing: Rural/Residential Roads -- No. 500511

Category  
Agency  
Planning Area  
Relocation Impact

Transportation  
Public Works & Transportation  
Countywide  
None.

Date Last Modified  
Required Adequate Public Facility

May 15, 2006  
NO

## EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY05	Est. FY06	Total 6 Years	FY07	FY08	FY09	FY10	FY11	FY12	Beyond 6 Years
Planning, Design and Supervision	1,400	0	200	1,200	200	200	200	200	200	200	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	18,033	1,333	1,800	14,900	1,800	2,200	2,500	2,800	2,800	2,800	0
Other	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>19,433</b>	<b>1,333</b>	<b>2,000</b>	<b>16,100</b>	<b>2,000</b>	<b>2,400</b>	<b>2,700</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>0</b>

## FUNDING SCHEDULE (\$000)

G.O. Bonds	19,100	1,333	1,667	16,100	2,000	2,400	2,700	3,000	3,000	3,000	0
Current Revenue: General	333	0	333	0	0	0	0	0	0	0	0

## ANNUAL OPERATING BUDGET IMPACT (\$000)

Program-Other				4,350	25	550	775	1,000	1,000	1,000	0
Net Impact				4,350	25	550	775	1,000	1,000	1,000	0

## DESCRIPTION

This project provides for the permanent patching of rural and residential roadways to ensure long term structural integrity of the road base. The County maintains a total of 263 lane miles of rural roads and 3,566 lane miles of residential roads. The Department estimates that upward to 1,000 lane miles of rural and residential roads require permanent patching due to deferred maintenance. The County spends approximately \$6,400 to \$8,000 per lane mile on this type of patching, 4-5 times more than cyclic, proactive permanent patching. This work must be completed in advance of any surface treatment.

## Service Area

Countywide

## Capacity

Funding levels will prepare approximately 313 lane miles of road base for resurfacing in FY07.

## JUSTIFICATION

The deterioration of bituminous pavement occurs because of bitumen evaporation, infiltration of moisture, and patterned traffic movement. Timely, cyclical overlays preserve pavements and prevent total and costly reconstruction. Highway Maintenance Section records show that rural and residential roadways are currently being resurfaced on average of once every 15 to 25 years, while industry standards recommend a five-year cycle. Deferring surface treatment beyond industry standard cycles causes rapid deterioration of the pavement surface, base, and sub-base. Major and costly permanent repairs are now required to the base and sub-base because roads are not being resurfaced in a timely manner.

## Plans and Studies

The March 2005, "Report of the Infrastructure Maintenance Task Force," identified an annual level of effort for permanent patching which supports a 5 year resurfacing accomplished through the operating budget.

## Cost Change

Cost change to increase the number of lane miles patched.

## STATUS

Ongoing. Rural/residential road mileage has been adjusted to conform with the State inventory of road mileage maintained by the State Highway Administration (SHA). This inventory is updated annually.

## OTHER

The design and planning stages, as well as project construction, will comply with the Department of Public Works and Transportation (DPWT), Maryland State Highway Administration (MSHA), Manual on Uniform Traffic Control Devices (MUTCD), American Association of State and Highway Officials (AASHTO), and American with Disabilities Act (ADA).

## FISCAL NOTE

G.O. bonds will be used for permanent patching (which should last the lifetime of the roadway if timely surface treatment is provided). Current Revenue from the Department's operating budget will be used for the resurfacing. The recommended methods of resurfacing for rural and residential roads are tar and chip and slurry seal respectively.

## APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY05	(\$000)
Initial Cost Estimate		2,000
First Cost Estimate		
Current Scope	FY07	19,433
Last FY's Cost Estimate		12,667
Present Cost Estimate		19,433

Appropriation Request	FY07	2,000
Appropriation Request Est.	FY08	2,400
Supplemental Appropriation Request	FY06	333
Transfer		0

Cumulative Appropriation		3,000
Expenditures/ Encumbrances		2,133
Unencumbered Balance		867

Partial Closeout Thru	FY04	0
New Partial Closeout	FY05	0
Total Partial Closeout		0

## COORDINATION

WSSC  
Washington Gas Light Company  
PEPCO  
Cable TV  
Verizon Wireless  
United States Post Office

## MAP

